



# Logging Monitoring and Observability in Google Cloud

## Overview

This course teaches participants techniques for monitoring and improving infrastructure and application performance in Google Cloud.

Using a combination of presentations, demos, hands-on labs, and real-world case studies, attendees gain experience with full-stack monitoring, real-time log management and analysis, debugging code in production, tracing application performance bottlenecks, and profiling CPU and memory usage.

When you complete this course, you can earn the badge displayed here! View all the badges you have earned by visiting your profile page. Boost your cloud career by showing the world the skills you have developed!

## Objectives

- Explain the purpose and capabilities of Google Cloud's operations suite.
- Implement monitoring for multiple cloud projects.
- Create effective monitoring dashboards and alerts. Create alerting policies, uptime checks and alerts.
- Explain how to collect logs using Cloud Logging and export for further analysis

## Prerequisites

To get the most out of this course, participants should have:

- Google Cloud Fundamentals: Core Infrastructure or equivalent experience
- Basic scripting or coding familiarity
- Proficiency with command-line tools and Linux operating system environments

## Course Duration

- 2 Days – 16 Hours

## Career Role

- Cloud Engineer

# Creating Tailor - Made Training Programs to Meet Your **Specific Goals**

## Discovery Process

Join us on a discovery journey to uncover your organization's unique needs. Through insightful conversations and meticulous analysis, we'll identify your training requirements.

01



## Training Framework Development

We'll craft a custom roadmap to boost your team's skills, integrating advanced instructional design for engaging, comprehensive training.

02



## Program Delivery

We'll bring your training vision to life with precision and care. Our seasoned trainers will expertly guide transformative learning experiences, fostering engagement and skill acquisition at every step.

03



## Outcome Assessment

We'll continuously evaluate training effectiveness through robust methodologies, gathering and analyzing participant feedback for invaluable insights and improvement opportunities.

04



## Cost-Benefit Analysis

We'll quantify the tangible and intangible benefits of your training investment, showcasing improved performance metrics and heightened employee satisfaction, proving the substantial returns from our partnership.

05



## Course Outline

The "Logging, Monitoring, and Observability in Google Cloud" course provides a comprehensive introduction to managing and monitoring cloud-based applications and infrastructure using Google Cloud's suite of tools. This course is designed for cloud engineers, system administrators, and IT professionals who are responsible for maintaining the performance, reliability, and availability of their organization's cloud resources.

### Module 1: Introduction to Google Cloud Operations Suite

- Lesson: Module Overview
- Lesson: Need for Google Cloud observability
- Lesson: Cloud Monitoring
- Lesson: Cloud Logging
- Lesson: Error reporting
- Lesson: Application Performance Management Tools

### Module 2: Monitoring Critical Systems

- Lesson: Module Overview
- Lesson: Monitoring Overview
- Lesson: Cloud Monitoring architecture patterns
- Lesson: Monitoring multiple projects
- Lesson: Data model and dashboards
- Lesson: Query metrics
- Lesson: Uptime checks
- **Lab:** Monitoring and Dashboarding Multiple Projects

### Module 3: Alerting Policies

- Lesson: Module Overview
- Lesson: SLI, SLO, and SLA
- Lesson: Developing an alerting strategy
- Lesson: Creating alerts
- Lesson: Deploy an application to Google Cloud and then create alerting policies for it
- Lesson: Service Monitoring
- **Lab:** Alerting in Google Cloud
- **Lab:** Service Monitoring

#### Module 4: Advanced Logging and Analysis

- Lesson: Module Overview
- Lesson: Cloud Logging overview and architecture
- Lesson: Log types and collection
- Lesson: Storing, routing and exporting the logs
- Lesson: Query and view logs
- Lesson: Using log-based metrics
- Lesson: Log analytics
- **Lab:** Log Analytics on Google Cloud

#### Module 5: Working with Audit Logs

- Lesson: Module Overview
- Lesson: Cloud Audit Logs
- Lesson: Data Access audit logs
- Lesson: Audit logs entry format
- Lesson: Best practices
- **Lab:** Cloud Audit Logs

# Indus Tech Services

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## Who We Are....

Indus Tech Services is an IT company that specializes in providing comprehensive training, consulting & implementation services for software solutions designed to address the diverse business challenges faced by organizations today. With a passion for technology and a deep understanding of business processes, Indus Tech is committed to empowering businesses to optimize their operations, boost productivity, and drive sustainable growth.

## Indus Tech Services and Google Cloud Partnership

At **Indus Tech Services**, our partnership with **Google Cloud (GCP)** provides unparalleled consulting and training services to help you harness the full potential of cloud technology. Our collaboration aims to deliver the following benefits to your organization.

- **Customized Training and Workshops:** We offer tailored training programs and workshops designed to empower your IT team and end users. Our expert-led sessions ensure your team gains the skills and knowledge needed to maximize the benefits of Google Cloud solutions.
- **Expert Consulting Services:** Our team of certified Google Cloud professionals provides strategic consulting to align your cloud initiatives with your business goals. From cloud strategy development to architectural design, we offer expert guidance to help you navigate the complexities of cloud adoption and optimization.
- **Seamless Implementation and Integration:** We specialize in the seamless implementation and integration of Google Cloud services into your existing infrastructure. Our proven methodologies and best practices ensure a smooth transition to the cloud, minimizing disruption and maximizing efficiency.

## Why Choose Us...

From time to time, life serves up a profound nudge, urging us to step beyond our routines and make a difference in the world. Indus Tech Services emerged from one such compelling wake-up call. We are not just a company; we are a dedicated force with a belief in providing solutions to organizations, regardless of their size, and we infuse a human touch into everything we do.

## Our Expertise

With over 25 years of collective experience navigating the intricacies of daily business transactions, irrespective of geographical, cultural, time zone, or language barriers, our team has honed their expertise to meet any challenge head-on. This wealth of experience has armed our resources with an unparalleled understanding and skill set to tackle a broad spectrum of obstacles.

## Training

With two decades of unwavering commitment and a global footprint, our company is a true pioneer in the fields of linguistic, transactional, technical, and behavioural training for some of the world's largest corporate entities. Our unparalleled expertise has been refined through years of dedication and innovation, making us the go-to choice for businesses seeking transformative training solutions.

## Consulting

Our company has been at the forefront of providing world-class IT consulting services to organizations spanning the globe. With an extensive and proven track record, we have honed our expertise to meet the ever-evolving technological needs and challenges faced by businesses, regardless of their scale or industry.

## Implementation

Our experience covers a broad spectrum of IT implementation services, including system integration, software deployment, network architecture, cloud migration, and infrastructure setup. We understand that the successful execution of IT projects is pivotal to an organization's growth and efficiency. Therefore, we bring a depth of knowledge and a commitment to delivering results that set us apart.

To know more contact us at [info@industechservices.com](mailto:info@industechservices.com) or call us at +91 - 99961 61170.